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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,084	09/23/2003	David Winn Blevins	000024-165	6340

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Seymour Levine
2C Chateaux Circle
Scarsdale, NY 10583

EXAMINER	
SHERMAN, STEPHEN G	
ART UNIT	**PAPER NUMBER**
2629	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/670,084	BLEVINS, DAVID WINN	
	Examiner	Art Unit	
	Stephen G. Sherman	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-16 and 18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *14-16 and 18* is/are allowed.

6)☒ Claim(s) *1,3 and 11* is/are rejected.

7)☒ Claim(s) *4-10 and 12-13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed the 23 August 2006. Claims 1, 3-16 and 18 are pending. Claims 2 and 17 have been cancelled.

Response to Arguments

2. Applicant's arguments filed the 23 August 2006 have been fully considered but they are not persuasive.

On page 13, second paragraph the applicant argues that claim 1, as amended, recites a novel and patentable contribution to the prior art and are in condition for allowance. The applicant's main argument is that Cottone et al. disclose a method for calibrating a display system, however, do not teach or imply the method recited now in amended claim 1, specifically that the establishment of evaluation parameters utilizing the chromaticity and luminance values is not taught or implied by Cottone et al. The examiner respectfully disagrees. As stated in the rejection found below, Cottone et al. do teach of the establishment of evaluation parameters utilizing chromaticity and luminance values. Therefore, Cottone et al. do teach the method of amended claim 1.

Claim Objections

3. Claim 1 is objected to because it recites the limitations "said color evaluation parameter" and "said target color evaluation parameter" while previously in the claim there is only stated of "an evaluation parameter" and "a target evaluation parameter." Therefore there is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Cottone et al. (US 6,677,958).

Regarding claim 1, Cottone et al. disclose a method for color calibrating a transmissive display system comprising the steps of:

applying signal values that select a target color in a look-up table in said display system to establish color on a screen of said display system (Fig. 2, step 38, see col. 3, lines 45-65, and col. 4, lines 10-11, where the target color can be selected from database which is the equivalent of a look-up table);

noting chromaticity of color displayed on said screen (Fig. 2, step 40, see col. 4, lines 10-20);

determining an evaluation parameter for said color utilizing said chromaticity (see col. 4, lines 11-12 where the chromaticities is the parameter);

determining a target evaluation parameter utilizing chromaticity for said target color (see col. 4, lines 10-20, where the target evaluation color represents a desired white point.);

comparing said color evaluation parameter to said target color evaluation parameter to establish a parameter difference value (Fig. 2, step 40 and step 42, where measuring the target value and comparing it to the AIM value is inherently establishing a parameter difference value);

comparing said parameter difference value to said specified tolerance range (Fig. 2, step 40, see col. 4, lines 10-20, where checking to see if the measured target is equal to the aim target inherently involves checking to see if it is in a specified tolerance range, even if that tolerance is zero); and

correcting said color when said parameter is not within said tolerance range, to provide a color within said tolerance range (Fig. 2, step 44, see col. 4, lines 16-20),

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cottone et al. (US 6,677,958) in view of Matsuda et al. (US 7,034,852).

Regarding claim 3, Cottone et al. disclose the method of claim 1.

Cottone et al. also disclose of establishing an evaluation parameter for color displayed in response to said correcting step (Fig. 2, see col. 4, lines 10-20, where the chromaticity is the evaluation parameter) and comparing said evaluation parameter for said response color to said target color evaluation parameter to determine if said response color is within said specified tolerance range of said target color (Fig. 2, step

42, where checking to see if the measured target is equal to the aim target inherently involves checking to see if it is in a specified tolerance range, even if that tolerance is zero).

Cottone et al. fail to explicitly teach adjusting said signal values for said target color to obtain modified signal values.

Matsuda et al. disclose a color calibration system for a display that adjusts signal values for said target color to obtain modified signal values (Fig. 2, section 450, see co.. 10, lines 33-35, where the calibration information output is modifying the input signal values R1, G1, and B1 to become R2, G2, and B2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Matsuda et al. in the method taught by Cottone et al. in order to add an extra level of color calibration by using calibration information on input signals prior to their input into a look-up table.

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cottone et al. (US 6,677,958) in view of Aleksic (US 2003/0210221).

Regarding claim 11, Cottone et al. disclose the method of claim 1.

Cottone et al. fail to teach a method comprising the steps of checking color displayed on said screen in a second ambient light condition, to determine a second ambient light color; comparing said second ambient light color to said target color to determine if said second ambient light color is within said specified tolerance range;

adjusting backlight level when said second ambient light color is not within said tolerance range to provide a color within said tolerance range.

Aleksic discloses a method of checking color displayed on said screen in a second ambience light condition, to determine a second ambient light color (see paragraph 34, lines 11-14, where any detection of the ambient light color at a later point in time is a second ambient light color under a second ambient light condition); comparing said second ambient light color to said target color to determine if said second ambient light color is within said specified tolerance range (see paragraph 34, lines 11-14, where the ambient light color is compared to a color lookup table, which inherently involves checking to see if it is within a specified tolerance range); adjusting backlight level when said second ambient light color is not within said tolerance range to provide a color within said tolerance range (see paragraph 34, lines 14-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Aleksic in the method taught by Cottone et al. in order to have a method of counteracting the effects of ambient light color on the display color.

Allowable Subject Matter

9. Claims 4-10 and 12-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

Relative to dependent claim 4, the prior art of record (Cottone, Matsuda, Aleksic) does not teach a signals adjusting step of subtracting backlight tristimulus values from corresponding target color tristimulus values to provide a corrected target color tristimulus values.

11. Claims 14-16 and 18 are allowed.

The following is an examiner's statement of reasons for allowance:

Relative to independent claim 14, the prior art of record (Cottone, Matsuda, Aleksic) does not teach a ratio determinator which provides a ratio of a first backlight luminance to a second backlight luminance; and a luminance modifier coupled to said ratio determinator to modify target color luminance in accordance with said ratio.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SS

24 January 2007

AMR A. AWAD
SUPERVISORY PATENT EXAMINER